Abstract

A description is given of a process for the oligomerization of 5  $\alpha$ -olefins having at least 3 carbon atoms, in which the olefin is brought into contact with a catalyst system obtainable from a chromium source, a 1,3,5-trialkyl-1,3,5-triazacyclohexane, where the alkyl radical has no  $\alpha$ ,  $\beta$  or  $\gamma$  branching, and at least one activator comprising a boron compound, with the molar ratio B:Cr 10 being at least 5. The process allows the preparation of trimers of the  $\alpha$ -olefin in high yield and with high selectivity.